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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,966	09/10/1999	SEIJI TAKEUCHI	35.G2449	3549

5514 7590 03/06/2002

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

ROBINSON, MARK A

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 03/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/393,966	Applicant(s) TAKEUCHI ET AL.	
	Examiner Mark A. Robinson	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-26 and 28-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-26 and 28-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

***Continued Prosecution Application***

1. The request filed on 1/3/02 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/393966 is acceptable and a CPA has been established. An action on the CPA follows.

***Claim Objections***

2. Claim 37 is objected to because of the following informalities: "the diffraction grating" lacks antecedent basis. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. Claims 10,11,13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites "An optical member." However, there is no antecedent basis for this limitation and it is unclear what the phrase references.

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In claims 11,13 and 15 it is unclear what substances would be considered "undesirable" since this would depend upon the particular application for the optical element.

***Claim Rejections - 35 USC § 102***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1,15,16,21-23,26,28,39,58,63,64 and 68/1,15,23,58,63 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitani et al.

Mitani shows in fig. 1 a transparent optical element(4) provided with a metal-containing (aluminum) reflection-preventing light shielding member(2,3) at the periphery thereof, whereby light is transmitted through an effective area of the element.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 3-14,17-20,24,25,29-36,40-47,60-62,65-67 and 68/4,8,11,13,17,19 and 69/1,4,8,11,13,15,17,19,23,58,63 and

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70/1,4,8,11,13,15,17,19,23,58,63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitani et al.

Mitani does not expressly teach the various materials or optical properties of the optical element as set forth in these claims. However, it has been held that selection of such materials or properties, all of which are well known, is within the general skill of the ordinarily skilled artisan depending upon the suitability of the material for the desired application. Accordingly, such features do not patentably distinguish the present invention over the prior art.

Mitani further does not teach alignment marks in conjunction with the optical element or shielding member. However, alignment marks are commonly found on such elements and members, and it would have been obvious to the ordinarily skilled artisan at the time of invention to use such alignment marks in order to assist in manufacturing or assembling the device.

Mitani further does not teach the optical element/shielding member to be used with the optical systems or methods set forth in these claims. However, use of Mitani's optical element/shielding member with any of these prior art systems would have been obvious to the ordinarily skilled artisan in

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order to provide the system with the reflection-prevention properties taught by Mitani.

8. Claims 37,38,48-57,59 and 68/48,53 and 69/48,53 and 70/48,53 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admission of the prior art in view of Mitani.

Applicant discloses a prior art diffraction grating, but does not teach a light shielding member disposed at the periphery thereof. However, Mitani shows such a light shielding member as discussed above, and it would have been obvious to the ordinarily skilled artisan at the time of invention to use Mitani's light shielding member with the prior art diffraction grating in order to provide the grating with unwanted reflection prevention properties.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hara et al, Edwards, and Tanaka et al all show light shielding members disposed at the peripheries of optical elements.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Robinson whose telephone number is (703) 305-3506.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached at (703) 308-1687. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in dark ink, appearing to read 'M. Robinson', is written over a horizontal line.

Mark Robinson

Patent Examiner

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3/3/02